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Integrating population issues into sustainable development, including in the post-2015 development agenda

Report of the Secretary-General

Summary

In its decision 2013/101, the Commission on Population and Development decided that the special theme for its forty-eighth session would be "Realizing the future we want: integrating population issues into sustainable development, including in the post-2015 development agenda". The present report is one of three reports that have been produced to guide the Commission's deliberations.

The central challenge in designing the post-2015 development agenda is to ensure that efforts to improve the quality of life of the present generation are far-reaching, broad and inclusive but do not compromise the ability of future generations to meet their needs. Accomplishing this goal hinges on the ability of the international community to ensure access to resources for growing numbers of people, eradicate poverty, move away from unsustainable patterns of consumption and production and safeguard the environment.

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In designing and implementing the new development agenda it is important to understand and account for the demographic changes that are likely to unfold over the next 15 years. While much remains unknown about the rate of transformation of the global economy or the speed at which technological advancements will be needed to improve efficiency and reduce humanity's environmental footprint, the speed and direction of population change, at least in the near future, is far more predictable. The report focuses on the demographic changes that are projected to occur over the next 15 years and discusses what they imply for efforts to achieve sustainable development.

I. Introduction

1. Significant progress has been made over the past 20 years in combating global poverty and addressing other internationally agreed development goals, such as improving gender equality, lowering child mortality, raising educational attainment and improving sanitation and access to clean drinking water. However, progress has been uneven within and across countries and regions and the benefits of social and economic progress have not been shared equally. At the same time, there is growing evidence that population growth, combined with economic development, rising standards of living and a higher level of consumption has resulted in changing patterns of land use, increased energy use and the depletion of natural resources, with signs of climate change and environmental degradation more visible than ever before.

2. Moving forward, the central challenge in designing the post-2015 development agenda is to ensure that efforts to improve the quality of life of the present generation are far-reaching, broad and inclusive but at the same time, fashioned in a way that does not compromise the ability of future generations to meet their own needs. Accomplishing this goal hinges on the ability of the international community to ensure access to resources for growing numbers of people, eradicate poverty, reduce social and economic inequality and end unsustainable patterns of consumption and production, while safeguarding the environment (see A/69/700).

3. In designing and implementing the new development agenda, it is important to understand and account for the demographic changes that are likely to unfold over the next 15 years and how such changes are expected to contribute to or hinder the achievement of the sustainable development goals. While much remains unknown about the rate of transformation of the global economy or the speed at which technological advancements will be needed to improve efficiency and reduce the world's environmental footprint, changes in population size, composition and spatial distribution in the near future are more certain.

4. Projected demographic changes over the next 15 years will shape the implementation of the post 2015 development agenda, creating both opportunities and challenges. The greatest and most fundamental challenge is to adjust to a world population of 8.4 billion people eager to achieve higher standards of living, while minimizing the negative impact of human activity on the environment. Some of the main opportunities are those associated with declines in mortality and fertility, which will alter the age structure of populations in ways that, at various stages of the demographic transition, may prove to be either a boost or an additional challenge to the achievement of inclusive and sustainable economic growth. Migration can contribute to sustainable development by expanding economic opportunities, reducing poverty, addressing labour markets imbalances and accelerating the diffusion of new ideas and technologies. Furthermore, higher population density, associated with urbanization, provides an opportunity for Governments to deliver such basic services as water and sanitation in a more cost-effective manner to greater numbers of people. Similarly, future population dynamics will themselves be influenced by the successes, challenges and shortcomings in the implementation of the post-2015 development agenda.

II. Preparing for a larger global population

5. World population has increased by 2 billion people over the past 25 years, from 5.3 billion in 1990 to 7.3 billion in 2015. Although population growth rates have slowed, the world's population is still growing by an additional 81 million people per year. By 2030, the target year for the achievement of the post-2015 development agenda, the global economy will need to support approximately 8.4 billion people (see table 1). With the exception of Europe, where total population is projected to decrease by slightly less than 1 per cent by 2030, all other regions are projected to grow by at least 10 per cent over the next 15 years. Africa, long the poorest and least developed continent, will account for more than 40 per cent of the absolute increase in population so that, by 2030, the region will account for nearly one fifth of the world's total population.

Table 1
Population by major area, 2015 and 2030 (medium variant)

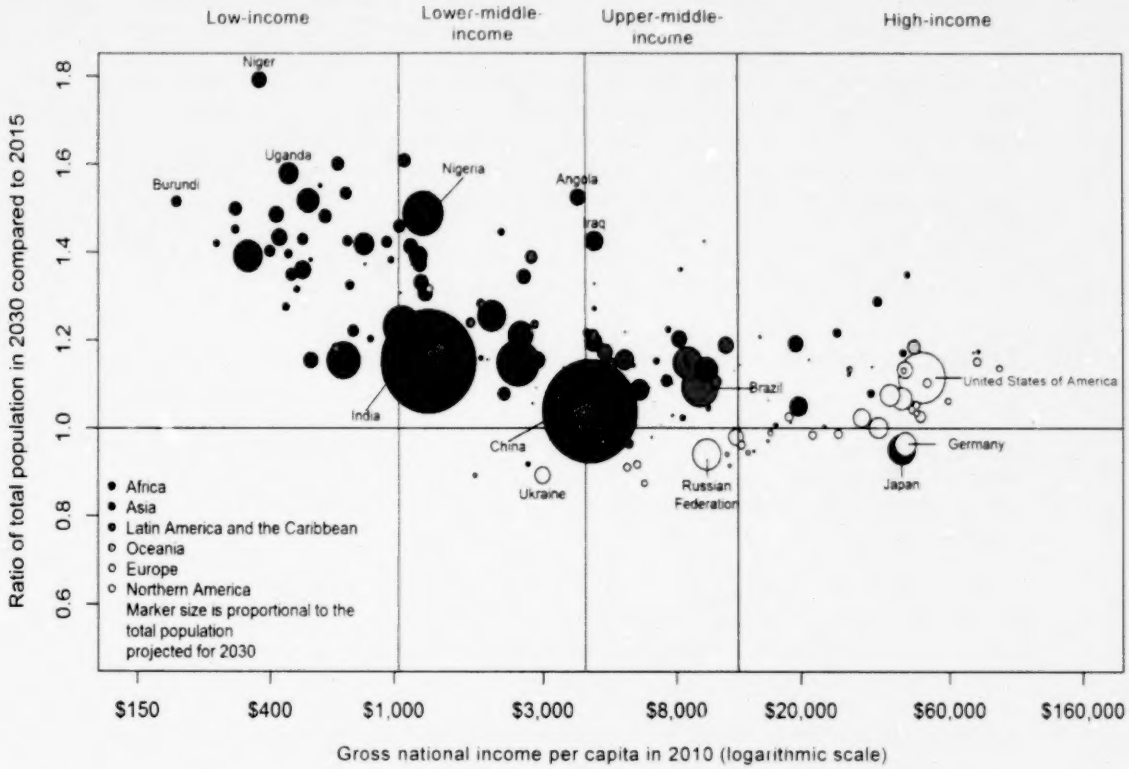
	Population (millions)			*Distribution of population (percentage)*	
	2015	*2030*	*Ratio of 2030:2015*	*2015*	*2030*
World	7 324.8	8 424.9	1.15	100.0	100.0
Africa	1 166.2	1 634.4	1.40	15.9	19.4
Asia	4 384.8	4 886.8	1.11	59.9	58.0
Europe	743.1	736.4	0.99	10.1	8.7
Latin America and the Caribbean	630.1	716.7	1.14	8.6	8.5
North America	361.1	403.4	1.12	4.9	4.8
Oceania	39.4	47.3	1.20	0.5	0.6

Source: *World Population Prospects: The 2012 Revision — Extended Dataset* (United Nations publication, Sales No. 13.XIII.10).

6. Discussion of the post-2015 agenda has stressed the importance of accounting for local conditions, which shape the specific challenges to and opportunities for sustainable development in each country. Country-level population projections produced by the Population Division provide important insights regarding the degree to which projected demographic changes over the next 15 years will be different or similar to those that have occurred in the recent past (see figure I). Continued population growth in many low-income countries (i.e., countries that appear in the top left-hand corner of figure I), driven by persistent high fertility, will make it harder for those Governments to eradicate poverty and inequality, combat hunger and malnutrition, invest in education and health, improve access to basic services, plan and develop cities, protect local ecosystems and promote peaceful and inclusive societies. At the other end of the spectrum, fertility is already below replacement level in a growing list of countries. In a number of cases, countries will experience both significant population ageing and absolute declines in their populations over the next 15 years, creating a different set of opportunities and challenges (see figure I).

Figure I

Ratio of projected population in 2030 to population in 2015 by present level of gross national income per capita



Source: *World Population Prospects: The 2012 Revision — Extended Dataset* and World Bank, World Development Indicators 2014 database (2014), available from http://data.worldbank.org/indicator.

7. At the household level, high fertility levels can exacerbate poverty and increase the likelihood of it being transmitted from one generation to the next. In low-income households, people typically marry earlier and have more children than in high-income households. Consequently, low-income families are less able to invest in their children's education, a critical factor for determining opportunities for social mobility. Larger family sizes also tend to constrain women from being able to work outside the home. Studies on the effects of lower fertility for household outcomes find that, at the household level, lower fertility increases investments in children[1] and is associated with a broad array of other positive outcomes, including improvements in women's health and empowerment, higher household earnings and assets, better use of preventive health services and improved outcomes for children's health and schooling.[2]

[1] R. Lee and others, "Is low fertility really a problem? Population aging, dependency, and consumption" *Science*, vol. 346, No. 6206 (2014), pp. 229-234.

[2] S. Singh, J. E. Darroch and L. S. Ashford, *Adding it Up: The Costs and Benefits of Investing in Sexual and Reproductive Health 2014* (New York, Guttmacher Institute, 2014).

8. Reductions in fertility typically imply changes in the timing of childbearing, with smaller family size being correlated with later age at first birth, longer intervals between births and lower levels of childbearing at older ages. Such changes reduce the proportion of births in certain high-risk categories and therefore contribute to reduced levels of child and maternal mortality and morbidity. Furthermore, the lifetime risk of maternal mortality depends on the number of pregnancies a woman has, meaning that lower fertility also translates into a lower lifetime risk of maternal death. Consequently, countries that have achieved rapid reductions in fertility typically have also recorded sizeable reductions in the number of maternal deaths.[3] Ensuring that women are able to exercise their reproductive rights, including decisions about childbearing and methods of family planning, not only helps women avoid unwanted or mistimed births, unsafe abortions and the risk of pregnancy-related morbidities, but it also expands their choices in life, especially where educational and economic opportunities are concerned.

III. Preparing for the next 2 billion newborns

9. Between 2015 and 2030, the time frame for the post-2015 development agenda, projections indicate that 2.1 billion babies will be born worldwide, an increase of 2 per cent over the total number of births over the previous 15-year period (see table 2). Approximately half of these babies will be born in Asia and one third will be born in Africa. Whereas relatively fewer births are projected for Europe, Asia and Latin America and the Caribbean over the next 15 year period, compared with the past 15 years, relatively more births are projected in Africa, Oceania and North America. An increasing number of births poses particularly significant challenges for low-income countries, where the rates of poverty and malnutrition are already high, levels of education are low, health-care systems are weak and the rates of infant and child mortality are high. Increased coverage, utilization and quality of sexual and reproductive health-care services for women and adolescents, particularly for those who do not want to become pregnant, combined with effective antenatal, intrapartum and postnatal interventions could, by 2025, avert 71 per cent of neonatal deaths (1.9 million), 33 per cent of stillbirths (0.82 million) and 54 per cent of maternal deaths (0.16 million) per annum.[4]

[3] S. Ahmed and others, "Maternal deaths averted by contraceptive use: an analysis of 172 countries", *The Lancet*, vol. 380, No. 9837 (2012), pp. 111-125.

[4] Z. A. Bhutta and others, "Can available interventions end preventable deaths in mothers, newborn babies, and stillbirths, and at what cost?", *The Lancet*, vol. 384, No. 9940, pp. 347-370.

Table 2
Births by major area, 2000-2015 and 2015-2030 (medium variant)

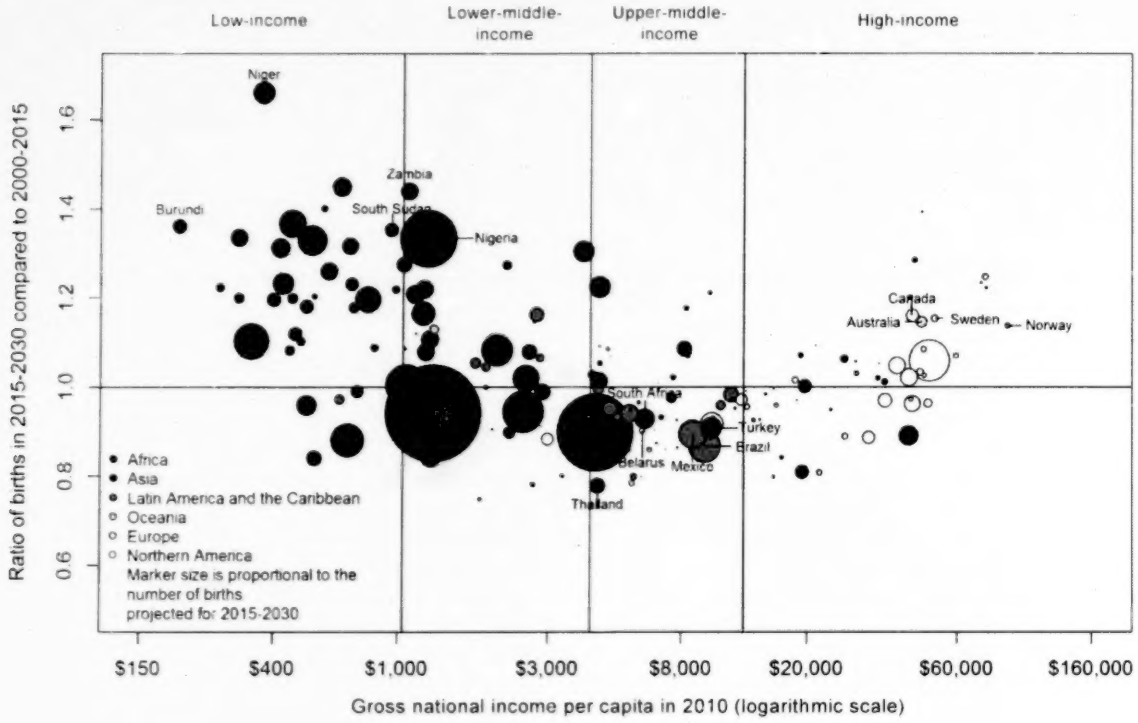
	Births over the period (millions)		*Ratio of 2015-2030 to 2000-2015*	*Distribution of births (percentage)*	
	2000-2015	*2015-2030*		*2000-2015*	*2015-2030*
World	2 022.3	2 068.7	1.02	100.0	100.0
Africa	535.5	660.8	1.23	26.5	31.9
Asia	1 122.5	1 054.8	0.94	55.5	51.0
Europe	116.7	111.9	0.96	5.8	5.4
Latin America and the Caribbean	169.9	157.9	0.93	8.4	7.6
North America	68.5	73.1	1.07	3.4	3.5
Oceania	9.3	10.3	1.11	0.5	0.5

Source: *World Population Prospects: The 2012 Revision — Extended Dataset.*

10. Approximately half the countries of the world can expect to have more births over the next 15 years than over the past 15 years (see figure II). Several of these countries, most of them in the low-income group, including Burundi, Mali, the Niger, Nigeria, South Sudan and Zambia, should plan for at least a 30 per cent increase in the absolute number of newborns over the next 15 years, compared to the previous 15 years, in order to maintain existing levels of maternal and child health care. By contrast, many upper-middle-income countries, including Brazil, Mexico, South Africa and Turkey, can expect fewer newborns over the next 15 years, potentially enabling them to raise the rates of health coverage and utilization of health-care services and the quality of sexual and reproductive health-care and child health-care services, within existing health-care budgets. Most high-income countries should plan for a roughly similar numbers of babies over the next 15 years relative to the most recent 15 years, although in a few countries, such as Australia, Canada, Norway and Sweden, where fertility levels have recovered slightly in the recent past, relatively more births are expected over the next 15 years if recent trends persist.

Figure II

Ratio of projected births in 2015-2030 to number of births in 2000-2015 by level of gross national income per capita in 2010

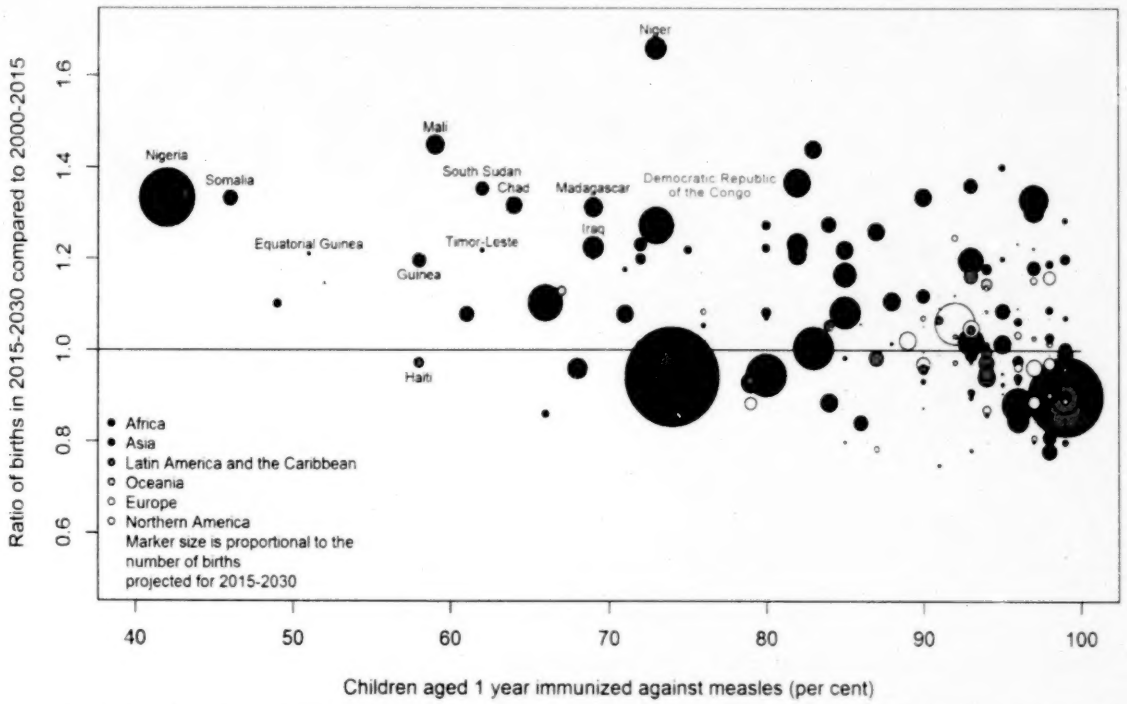


Source: *World Population Prospects: The 2012 Revision – Extended Dataset* and World Development Indicators 2014 database.

11. An increase in the number of births over the next 15 years will challenge countries' ability to provide access to health-care services of high quality for women and children. This is particularly true in Africa, where the expected growth in the number of births is greatest. Many of the countries that are projected to experience high rates of increase in the number of births already face serious challenges in delivering adequate newborn care and immunizations (see figure III). For example, of the 28 countries where less than 75 per cent of 1-year-olds were immunized against measles in 2012, half are projected to experience at least 20 per cent more births in 2015-2030 compared to 2000-2015. Immunization programmes need to be scaled up rapidly in those countries, not only to close the current shortfall in coverage but also to prepare for the increased demand posed by growing numbers of births in the coming years.

Figure III

Ratio of projected births in 2015-2030 to births in 2000-2015 by the present level of immunization coverage against measles

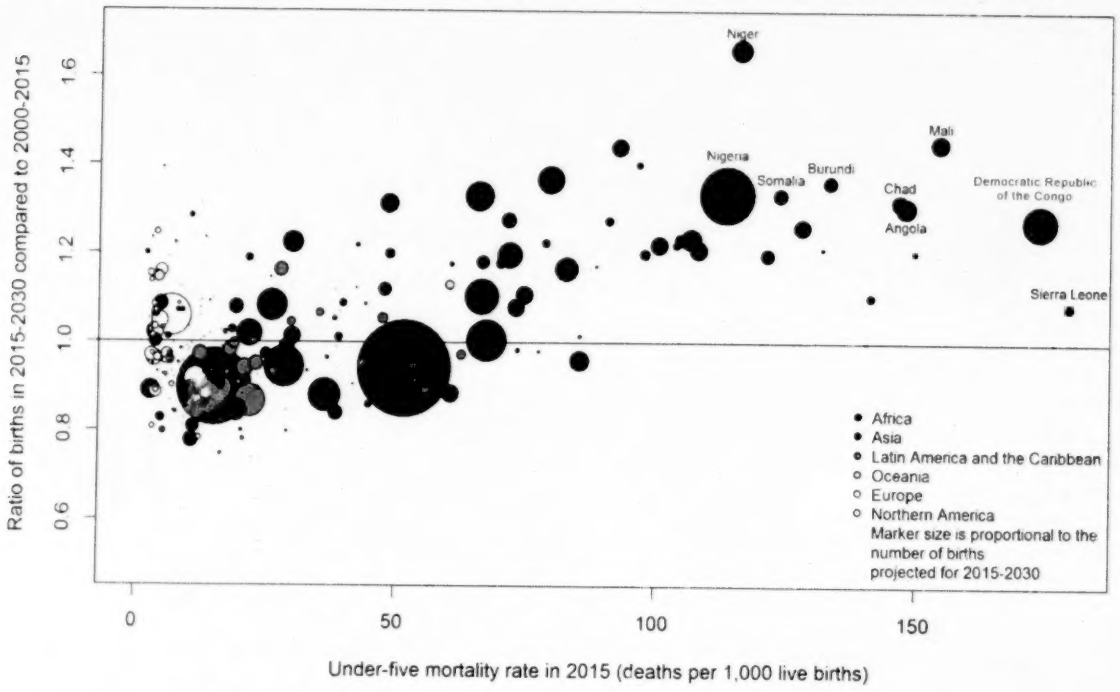


Source: *World Population Prospects: The 2012 Revision – Extended Dataset* and United Nations, Millennium Development Goals indicators database 2014, available from http://mdgs.un.org/unsd/mdg/Data.aspx.

12. Since the adoption of the Millennium Development Goals in 2000, the rate of decline in child mortality has accelerated globally and in many regions. Nevertheless, child mortality remains high in some places, so that approximately 85 million of the 2.1 billion babies born between 2015 and 2030 will not survive to their fifth birthday. While further reductions in child mortality are anticipated in all regions, roughly 80 out of every 1,000 babies born in Africa between 2015 and 2030 will likely die before the age of 5, as well as 30 of every 1,000 babies born in Asia and 17 of every 1,000 born in Latin America and the Caribbean. Child deaths will be concentrated increasingly in Africa. Countries with the highest levels of child mortality will face the greatest strain on health-care systems as the number of births continues to increase: virtually every country where child mortality is still above 75 per 1,000 will experience significantly more births over the next 15 years compared to the previous 15 years (see figure IV).

Figure IV

Ratio of projected births in 2015-2030 to births in 2000-2015 by the present level of child mortality



Source: World Population Prospects: The 2012 Revision — Extended Dataset.

IV. Preparing for the next 2 billion children to reach school age

13. Between 2015 and 2030, projections indicate that approximately 2.0 billion children will reach the age of 5, 144 million more than during the previous 15-year period (see table 3). Africa can expect a 34 per cent increase in the number of 5-year olds, Oceania a 16 per cent increase, and North America a 10 per cent increase. These children, like those before them, will require a range of services, including access to child-friendly health-care services, and will need to be enrolled in primary education.

Table 3
Children turning 5-years-old by major area, 2000-2015 and 2015-2030 (medium variant)

	Children turning 5 over the period (millions)		*Ratio of 2015-2030 / 2000-2015*	*Distribution of 5-year-olds (percentage)*	
	2000-2015	*2015-2030*		*2000-2015*	*2015-2030*
World	1 842.3	1 986.0	1.08	100.0	100.0
Africa	425.7	568.4	1.34	23.1	28.6
Asia	1 060.1	1 059.7	1.00	57.5	53.4
Europe	113.4	117.0	1.03	6.2	5.9
Latin America and the Caribbean	168.3	158.2	0.94	9.1	8.0
North America	66.1	72.5	1.10	3.6	3.6
Oceania	8.7	10.2	1.16	0.5	0.5

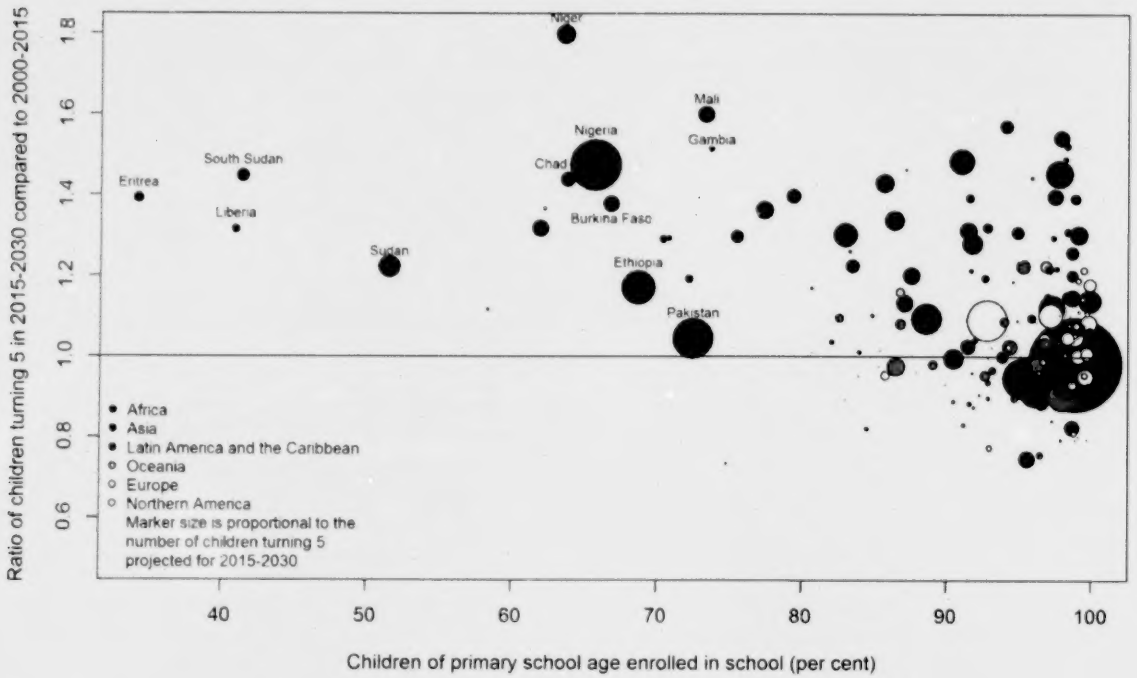
Source: World Population Prospects: The 2012 Revision — Extended Dataset.

14. Although substantial progress has been made towards universal primary education over the past 15 years, many Governments will face numerous challenges in maintaining current levels of school enrolment. Among the 23 countries with less than 80 per cent of primary school-aged children enrolled in primary school in or around 2013, all but two will need to serve a larger number of school-aged children over the coming 15 years. An estimated 44 countries, 34 of which are located in Africa, will need to plan for at least 20 per cent more 5-year-olds in 2015-2030 than in 2000-2015 (see figure V). Similar needs are imminent for many Governments as relates to the projected demand for secondary school places or technical or vocational training, which are becoming increasingly important for low- and middle-income countries to remain competitive in the global economy.

15. Rapid population growth will require greater efforts to increase school enrolment rates and improve levels of child health. Increasing numbers of children and young people place additional demands on public services, obliging Governments either to shift their spending priorities or to reduce their expenditures per child. As low- and middle-income countries strive to expand education and health-care services, those with the highest rates of population growth will, ceteris paribus, face the greatest strains. With an average rate of population growth of 2.3 per cent per annum, the least developed countries will need to increase their expenditures on education by approximately 40 per cent by 2030, in order to maintain current classroom sizes and pupil-to-teacher ratios.

Figure V

Ratio of projected number of children turning 5 in 2015-2030 to number who turned 5 between 2000-2015 by primary school enrolment rate



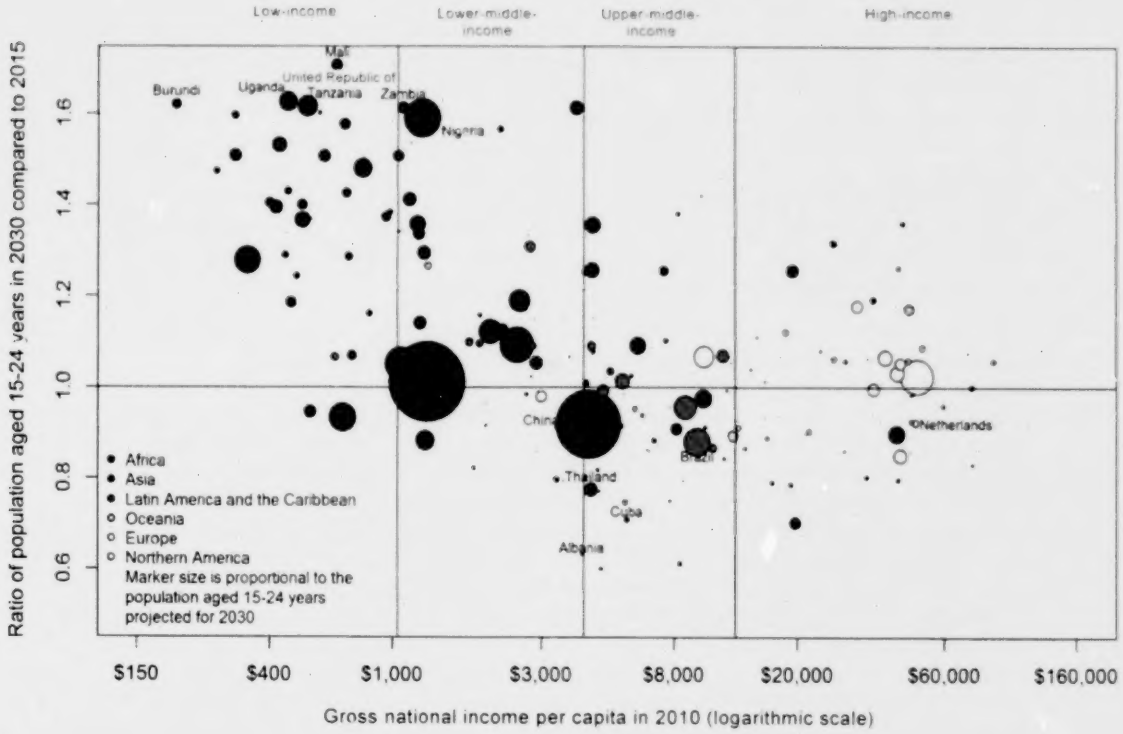
Source: *World Population Prospects: The 2012 Revision — Extended Dataset* and Millennium Development Goals indicators database.

V. Preparing for the next 1.9 billion young people

16. Between 2015 and 2030, 1.9 billion young people are projected to turn 15 years old, a 3 per cent increase at the global level. This young generation represents a major promise for economic development, technological innovation and social change. Globally, the total number of young people is at an all-time high, with 1.2 billion people between the ages of 15 and 24 in 2015 and nearly 1.3 billion projected by 2030. The number of adolescents and youth aged between 15 and 24-years old in Africa will increase from 226 million in 2015 to 321 million in 2030. Increases in the number of young people will be particularly visible in several low- or lower-middle-income African countries, including Burundi, Mali, the Niger, Nigeria, Uganda, the United Republic of Tanzania and Zambia, where the number of young people aged between 15 and 24 is projected to increase by more than 60 per cent between 2015 and 2030 (see figure VI). In stark contrast, the number of young people in Asia, Europe and Latin America and the Caribbean is projected to decline, in some cases significantly. For example, the population aged between 15 and 24 will decline by around 8 per cent in Brazil, China and the Netherlands between 2015 and 2030, and by more than 20 per cent in Albania, Cuba and Thailand.

Figure VI

Ratio of projected population aged 15-24 years old in 2030 to number in 2015 by the present level of gross national income per capita



Source: *World Population Prospects: The 2012 Revision — Extended Dataset* and World Development Indicators 2014 database.

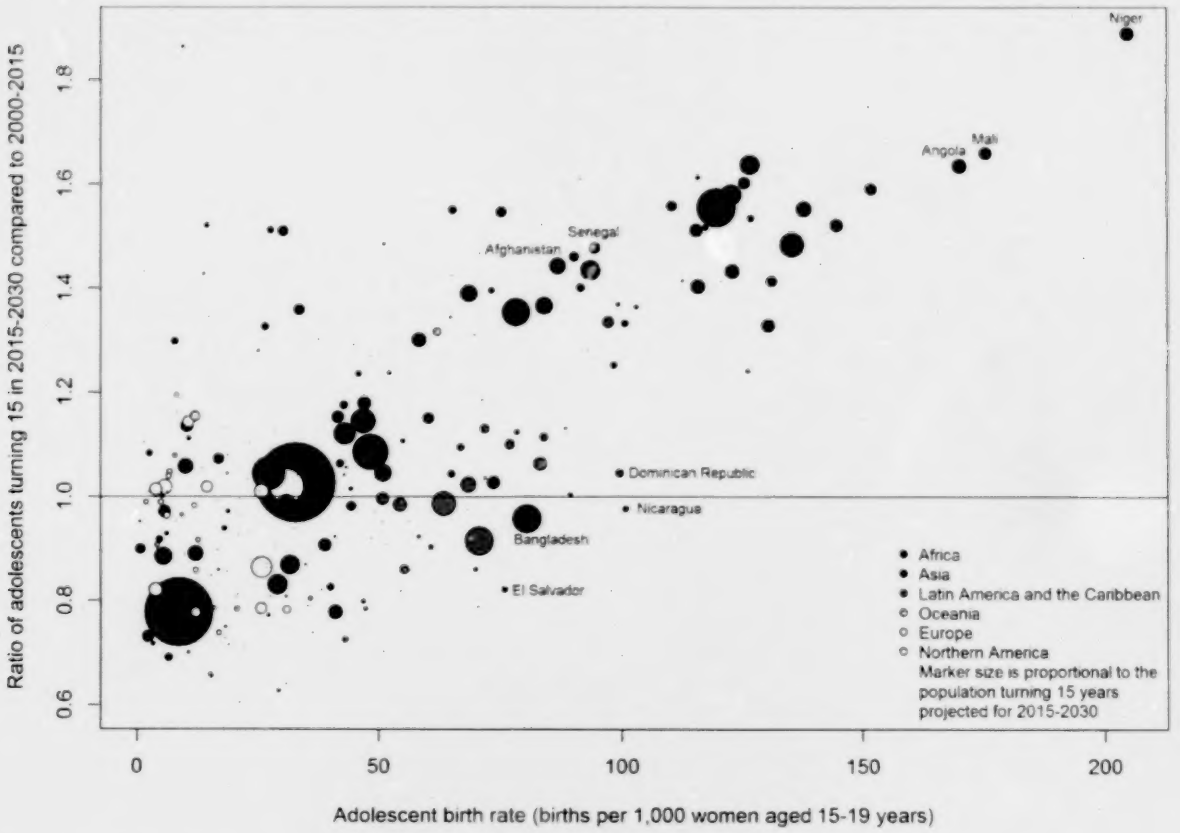
17. Adolescence is a period of major physical, psychological and social change, during which adolescents become more independent and also begin to make decisions and engage in behaviours that can have important implications for the remainder of life. Much depends on adolescents' ability to take advantages of opportunities for personal growth by going to school and being employed, while having access to youth-friendly services to promote well-being, including access to modern contraceptives to prevent adolescent pregnancy. Some adolescents begin to experiment with tobacco, alcohol or harmful drugs, with potential consequences not only for their current well-being, but also for their health later in adulthood. The dietary and physical activity habits established during adolescence are known to extend well into adulthood, sometimes with powerful implications for disease risks in later life, such as heart disease and certain forms of cancer. Adolescents also have relatively high migration rates. In some cases, young migrants engage in irregular and unsafe migration, which leaves them at risk of becoming victims of human trafficking.

18. Young people can be an important vehicle for economic development and social change, provided that they are given the right start in life. Yet projections indicate that the countries that will experience the largest growth in the number of adolescents and youth over the coming 15 years are precisely those that are already struggling to meet the educational and health needs of the current cohort. Greater investments in secondary and tertiary education, health and decent work are essential to their successful transition to adulthood and to the achievement of sustained and inclusive economic growth and development, as well as one of the best ways to prepare for future population ageing. Compared to 15 years ago, adolescents in 2015 are, on average, healthier and more likely to attend school, to postpone entry into the labour force and to delay marriage and childbearing. But change is not occurring at the same pace everywhere, so growing disparities exist among adolescents and youth within and across countries with respect to access to education and health-care services, employment opportunities and the timing and sequencing of marriage and childbearing.

19. Adolescents require sexual and reproductive health-care services specifically geared towards meeting their needs. In many societies, adolescents face pressure to engage in sexual activity, with young women and girls being especially vulnerable. Many of the countries that will experience the largest increases in the number of young people aged between 15 and 24 years between 2015 and 2030 already face significant challenges in meeting the health needs of the current cohort of young people, particularly with respect to their reproductive health. Adolescent pregnancy can also have negative social and economic effects on girls, especially if they drop out of school. Pregnancy and childbirth complications are the second leading cause of death among young women between the ages of 15 and 19 globally. Early childbearing also increases the health risks to the newborn child. Of the 83 countries with adolescent birth rates of greater than 50 per 1,000 during the period from 2010 to 2015, 47 countries will see an increase in the number of adolescents of at least 20 per cent over the coming 15 years and 31 countries will experience an increase in the number of adolescents of more than 40 per cent (see figure VII). In many Latin America and Caribbean countries, adolescent fertility has remained high, even in cases where the total fertility rate has fallen below the replacement level. Of the 26 countries where the adolescent birth rate in between 2010 and 2015 exceeds 100 births per 1,000 young women aged between 15 and 19, 20 countries will need to provide services to at least 40 per cent more adolescents between now and 2030 than between 2000 and 2015. Similarly, many of the countries struggling to reverse significant HIV prevalence are those that, over the next 15 years, will experience considerable growth in the number of adolescents, implying the need to significantly increase the resources available to maintain and expand coverage for HIV prevention and treatment services aimed at young people (see figure VIII).

Figure VII

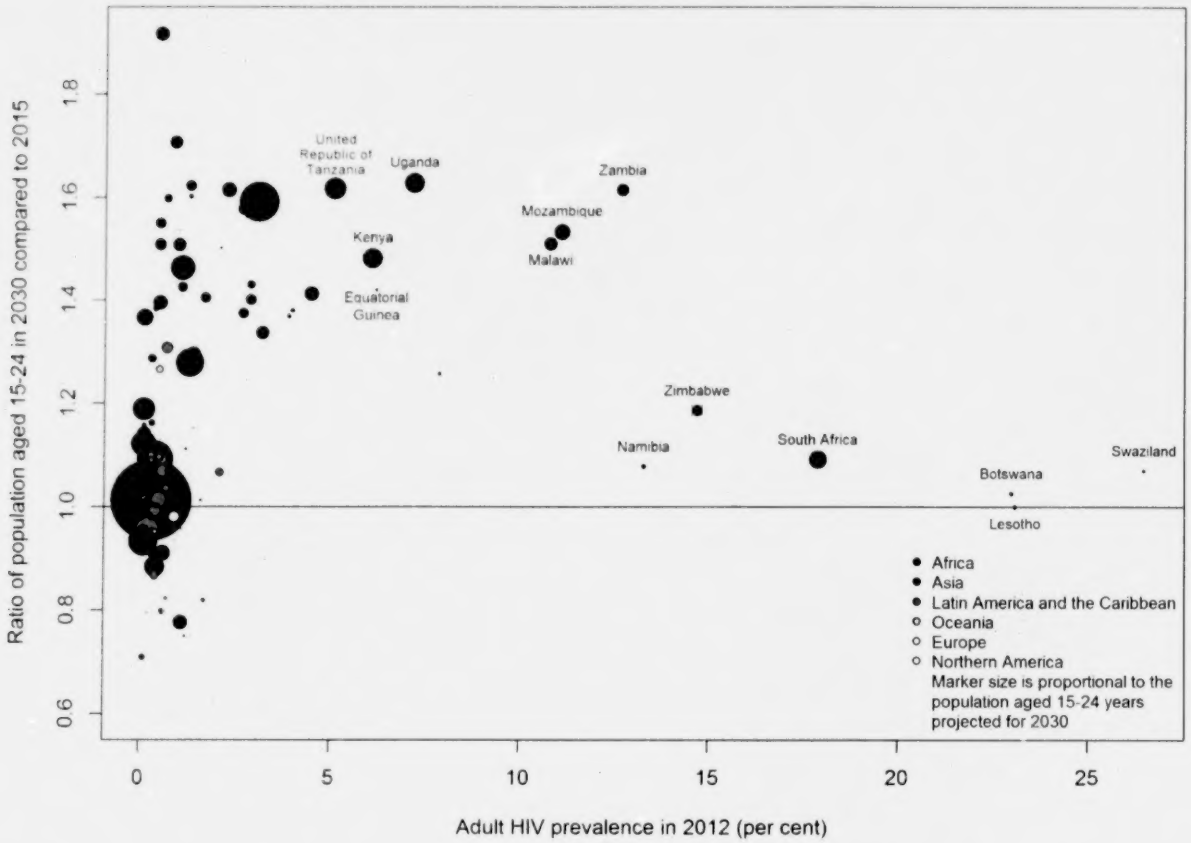
Ratio of projected number of young people turning 15 during 2015-2030 compared to number who turned 15 during 2000-2015 by the present adolescent birth rate



Source: *World Population Prospects: The 2012 Revision — Extended Dataset.*

Figure VIII

Ratio of projected number of young people aged 15-24 in 2030 compared to number in 2015 by present level of adult HIV prevalence



Source: *World Population Prospects: The 2012 Revision — Extended Dataset* and Millennium Development Goals indicators database.

20. The global youth unemployment rate continues to remain above the level of 2007, before the beginning of the economic and financial crisis. Youth unemployment and underemployment is high in a number of countries where young people make up a large proportion of the labour force. Young workers often lack adequate social protection and receive below-average wages. The difficulties faced by youth in seeking employment are also reflected in longer job search periods and lower job quality. These difficulties are heightened by youth lacking the requisite skills. In Europe, an increasing proportion of employed youth are engaged in temporary employment or part-time work. The lack of economic opportunities can be a catalyst for social unrest. In some settings, countries with a large unemployed youth population are, other things being equal, at a higher risk of political violence than countries with an older age structure.[5] High rates of youth unemployment and a

[5] T. F. Azeng and T. U. Yogo, "Youth unemployment and political instability in selected developing countries", Working Paper Series, No. 171 (Tunis, African Development Bank, 2013).

lack of channels for safe, orderly and legal migration can result in young people engaging in risky cross-border movements, in search of better opportunities.

21. As mortality and fertility decline, countries typically enjoy a period when the ratio of the working-age population to dependants rises. The resultant changes in the age structure of a population can create a window of opportunity for more rapid economic growth. Reaping this demographic dividend is time-sensitive and capitalizing on the benefits is not automatic, but dependent on policy. In East Asia, where the change from high to low rates of mortality and fertility has been more compressed than elsewhere, a considerable body of research suggests that the demographic dividend has been an important contributor to that region's economic success.[6] Latin America, by contrast, has undergone a similar demographic transition but has not, thus far, capitalized on it to the same extent,[7] while the opportunity to reap the economic benefits of a demographic dividend in sub-Saharan Africa still lies ahead.

VI. Preparing for the next cohorts of reproductive age while promoting gender equity and empowering women

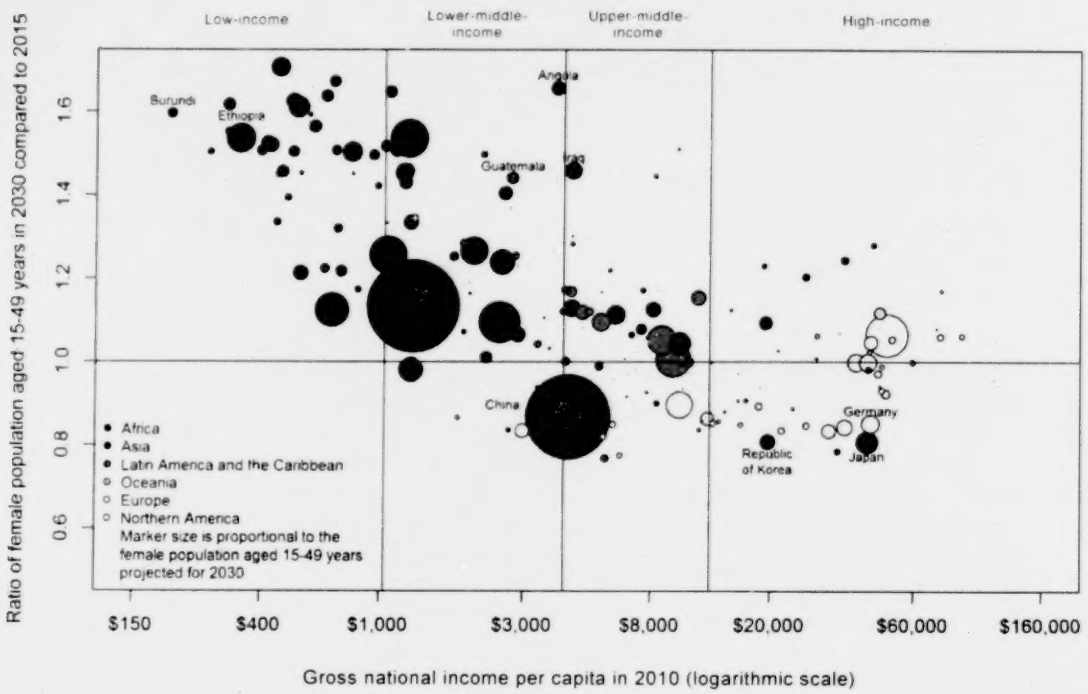
22. Between 2015 and 2030, the total number of women of reproductive age is projected to increase by 144 million, from 1.9 billion to 2.0 billion. While the number of women of reproductive age will drop by 10 per cent or more in a number of European countries between 2015 and 2030, it will increase in all other major areas and by 45 per cent in Africa (see figure IX).

[6] D. E. Bloom and J. G. Williamson, "Demographic transitions and economic miracles in emerging Asia", *World Bank Economic Review*, vol. 12, No. 3 (1998), pp. 419-455.

[7] L. Rosero-Bixby, "Generational transfers and population aging in Latin America", *Population and Development Review* vol. 37, Suppl. 1 (2011), pp. 143-157.

Figure IX

Ratio of projected number of women aged 15-49 in 2030 to number in 2015 by the present level of gross national income per capita



Source: *World Population Prospects: The 2012 Revision — Extended Dataset* and World Development Indicators 2014 database.

23. The empowerment of women and the achievement of gender equality are important ends in themselves, and both contribute to sustainable development as well. The Programme of Action of the International Conference on Population and Development lists a broad array of actions to eliminate inequalities between men and women, including: establishing mechanisms for women's equal participation and equitable representation at all levels of the political process; promoting women's education and skills development, thereby improving women's ability to earn an income and become self-reliant; ending all forms of discrimination against women; ensuring women's equal access to the labour market and social security; eliminating violence against women; and assisting women in establishing and realizing their rights, including those related to their sexual and reproductive health.

24. Improving women's education is one of the most important means of empowering them with the knowledge and skills necessary to participate fully in the development process. Evidence shows that achieving gender equality in secondary and higher education, in the labour force and in political processes is not only associated with lower fertility, but also with greater well-being, productivity in the labour market and protection from abuse and exploitation. In almost all countries of the world, women with higher levels of education have fewer children and their

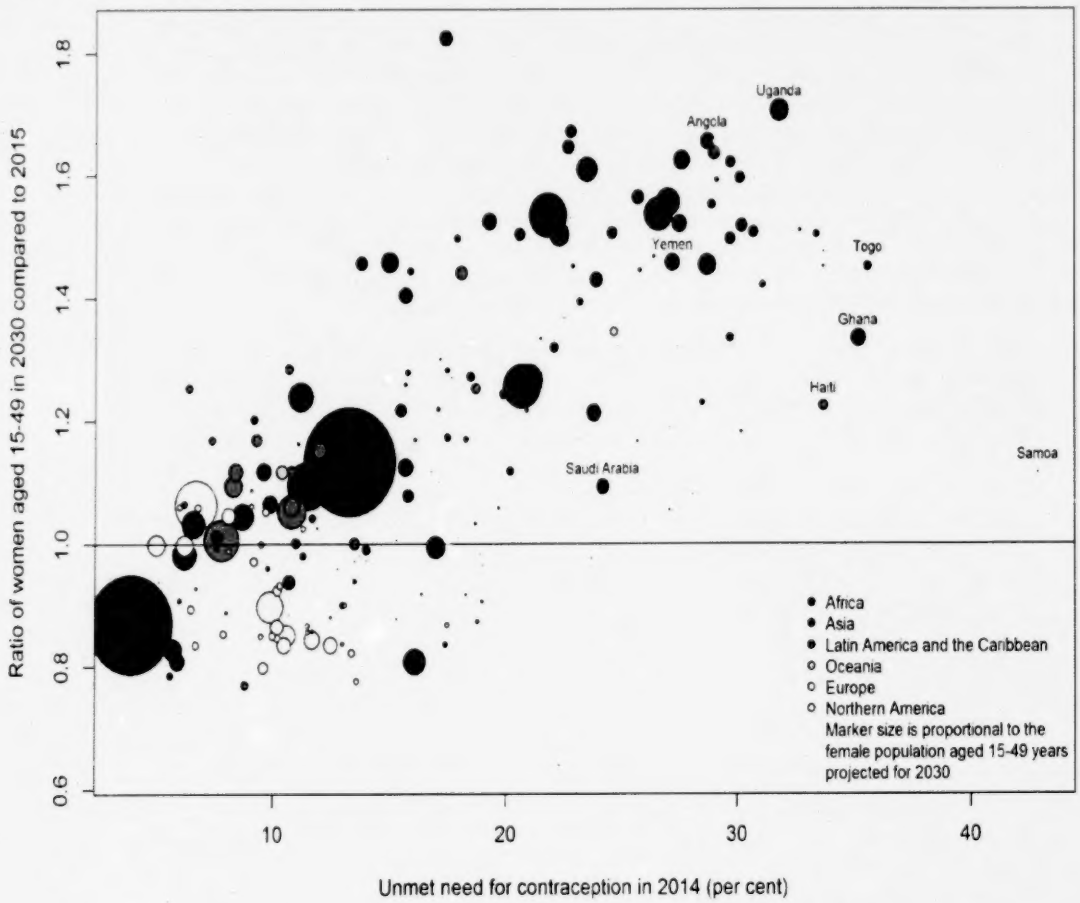
children have better chances of survival. In 2012, all regions achieved, or were close to achieving, gender parity in primary education. However, women still face persistent disadvantages in selected countries at the secondary and tertiary levels.

25. Women lag behind men in a number of other crucial areas, including access to decent work and political decision-making. Female labour force participation rates vary widely, reflecting different economic, social and cultural factors and social norms. Globally, women's access to paid employment in the non-agricultural sector has slowly increased over the past two decades. Women's share of paid employment in the non-agricultural sector increased globally, from 35 per cent in 1990 to 40 per cent in 2012, with some progress recorded in almost all regions. But women remain far more likely to have part-time jobs, to earn less than men for doing the same job and to work in certain low-paying occupations with limited labour protection, such as domestic work. In addition, women remain underrepresented compared to men in national parliaments and other political decision-making bodies.

26. Growing numbers of women of reproductive age and the increasing utilization of contraception among women will make it harder for Governments to meet the demand for family planning services. Currently, the unmet need for family planning services is highest in sub-Saharan Africa, which is the region expected to experience the largest increase in the number of women of reproductive age over the next 15 years. An estimated 44 countries, including 37 in Africa, need to plan for at least a 40 per cent increase in the number of women of reproductive age by 2030. All of these countries have a substantial unmet need for contraception (see figure X).

Figure X

Ratio of projected number of women aged 15-49 years old in 2030 compared to 2015 by the present level of unmet need for contraception



Source: *World Population Prospects: The 2012 Revision — Extended Dataset* and Millennium Development Goals indicators database.

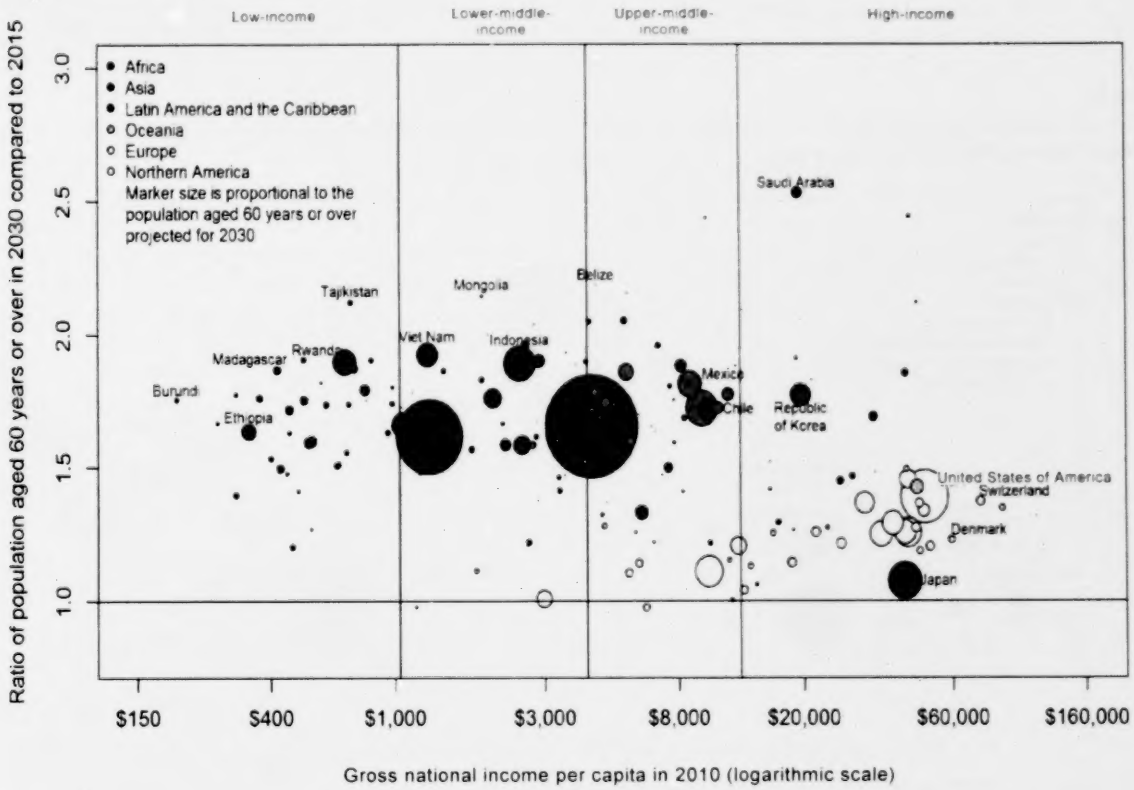
VII. Preparing for larger numbers of older persons

27. Patterns of declining mortality and fertility over the past two decades have led to significant shifts in the age structure of the world's population, so that persons aged 60 or over are now the world's fastest growing age group. While the population ageing process is most advanced in countries of Europe and North America, where 1 of every 5 people is aged 60 or over according to figures for 2015, a rapid growth in the number of older persons is expected over the next 15 years across all major income groups and areas of the world (see figure XI), raising questions about the well-being of older persons with regard to their economic security in old age, their health, their level of informal and formal support networks and the protection of their rights. No reference was made to the needs of older persons in the United Nations

Millennium Declaration (General Assembly resolution 55/2), which was signed in 2000 when persons aged 60 or over comprised 10 per cent of the world's population. However, concerns about population ageing can be expected to grow over the next 15 years, given that by 2030, 16 per cent of people worldwide will be aged 60 or older.

Figure XI

Ratio of projected number of persons aged 60 or older in 2030 compared to 2015 by the present level of gross national income per capita



Source: *World Population Prospects: The 2012 Revision — Extended Dataset* and World Development Indicators 2014 database.

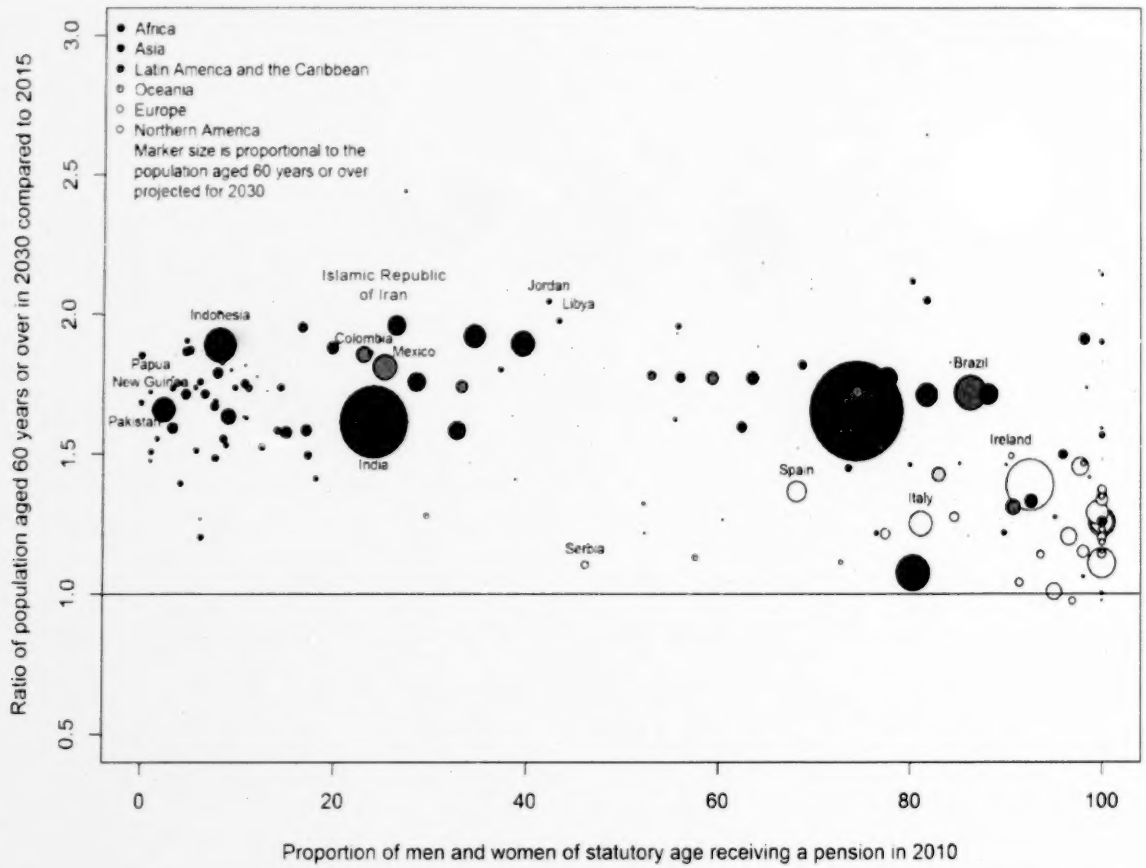
28. In recent years, many middle- and low-income countries have expanded pension coverage through a mix of contributory and non-contributory schemes. Nevertheless, nearly half of all older people do not receive any form of pension and, for many of those who do, the level of support is inadequate. Large numbers of older people are entering retirement age in countries where significant social support systems have yet to be put in place (see figure XII). There is an urgent need to expand coverage, both in countries that yet to put systems in place and in countries that have such systems, as some existing systems are under stress because of the effects of population ageing. Many high-income countries have reduced benefits or raised the statutory age of retirement. Inadequate social protection

constitutes a major obstacle to sustainable development, as it is associated with high and persistent levels of poverty and inequality.

29. As populations age, non-communicable diseases account for a growing share of the overall disease burden, thereby confronting health-care systems with new prevention and treatment challenges. The growth in the number of older persons has increased the burden of disability related to such diseases in all regions (see figure XIII). Continued population ageing, accompanied by the trend towards smaller families, which limits opportunities for informal care, as well as the desire to incorporate new technological advances into medical care, can be expected to exert continued upward pressure on health-care budgets.

Figure XII

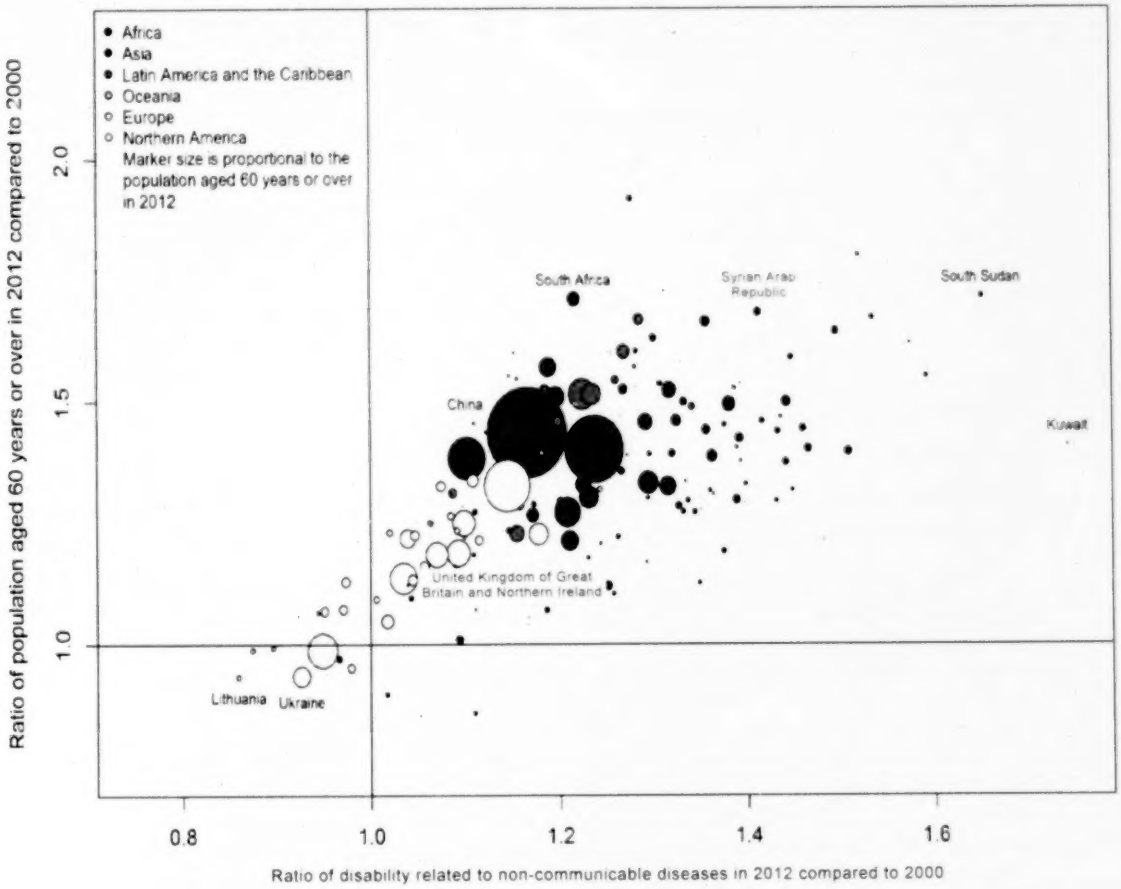
Ratio of the projected number of persons aged 60 in 2030 versus the number in 2015 by level of pension coverage among those of statutory age



Source: *World Population Prospects: The 2012 Revision — Extended Dataset* and International Labour Organization, "Share of population above the statutory pensionable age receiving an old-age pension", data online (2014). Available from www.social-protection.org/gimi/gess.

Figure XIII

Change in disability related to non-communicable diseases at all ages versus change in the population aged 60 or over, 2000-2012



Source: *World Population Prospects: The 2012 Revision — Extended Dataset* and World Health Organization, Global health estimates for 2000-2012 (2014). Available from www.who.int/healthinfo/global_burden_disease/estimates/en/index2.html.

VIII. Preparing for growing numbers of urban residents

30. Cities are currently home to more than half of the world's population, and all of the 1.1 billion increase in global population over the next 15 years is expected to occur in urban areas. All regions, with the exception of Europe, are projected to record increases in the sizes of their urban populations of at least 15 per cent. Africa and Asia are projected to have the largest increases in the sizes of their urban populations (see table 4). Further, the number and size of the world's largest cities are unprecedented. At the beginning of the twentieth century, only 16 cities contained 1 million people or more. Today, there are over 500 such cities and many

of the most rapidly growing cities are located in countries least able to keep up with the demand for housing and basic services. Megacities, defined as urban agglomerations of 10 million inhabitants or more, have also become both more numerous and considerably larger in size. In 2015, 6.4 per cent of the world's population resides in megacities. By 2030 that proportion is expected to increase to 8.7 per cent.

Table 4
Urban population by major area, 2015 and 2030

	Urban population (millions)			*Distribution of urban population (percentage)*	
	2015	*2030*	*Ratio of 2030:2015*	*2015*	*2030*
World	3 957.3	5 058.2	1.28	100.0	100.0
Africa	471.6	770.1	1.63	11.9	15.2
Asia	2 113.1	2 752.5	1.30	53.4	54.4
Europe	547.1	567.0	1.04	13.8	11.2
Latin America and the Caribbean	502.8	595.1	1.18	12.7	11.8
North America	294.8	339.8	1.15	7.4	6.7
Oceania	27.9	33.7	1.21	0.7	0.7

Source: World Population Prospects: The 2012 Revision — Extended Dataset.

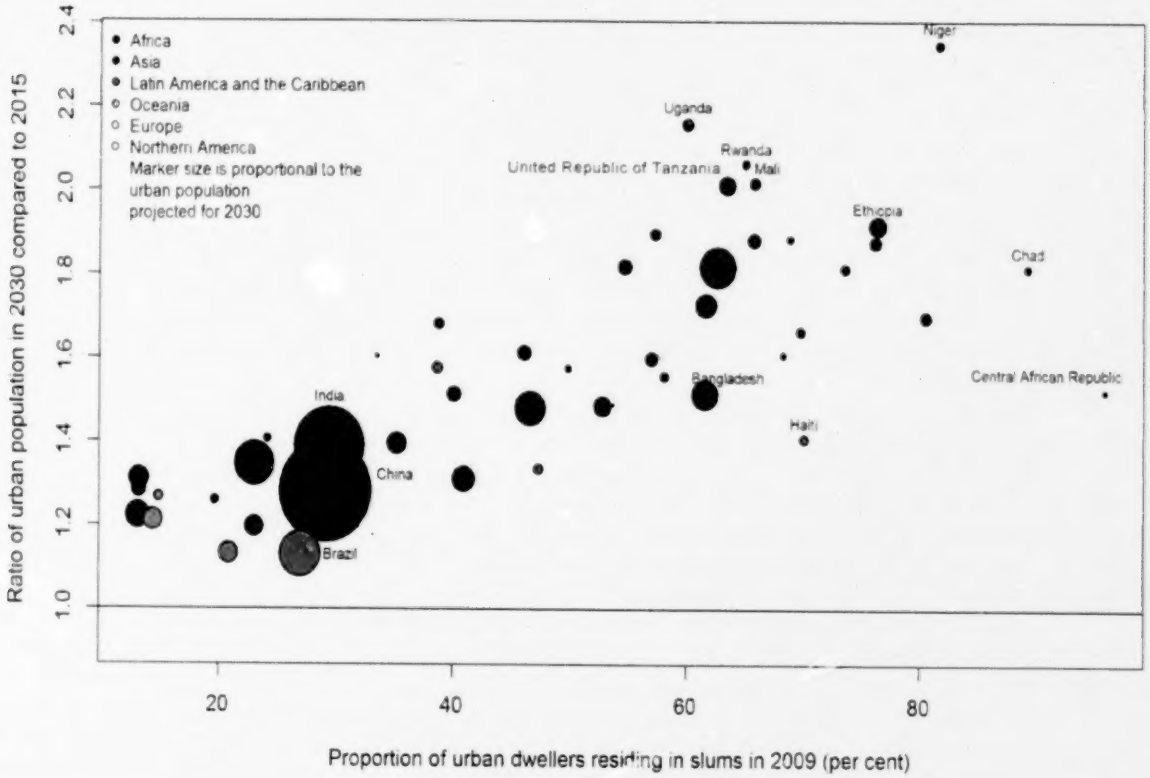
31. Cities have always been focal points for economic growth, innovation and employment. Cities are where the vast majority of modern productive activities are concentrated and where the vast majority of paid employment opportunities are located. As cities grow, managing them becomes more complex. Yet high population density may also be good for minimizing the effect of mankind on natural ecosystems, as high population density typically implies a lower per capita cost for providing infrastructure and basic services. Although the Millennium Development Goal target of significant improvement in the lives of at least 100 million slum dwellers has been met, the number of people living in slum conditions continues to grow and many of the countries with the fastest rates of urban population growth are those that already concentrate a large proportion of urban dwellers in slums (see figure XIV). The nature of future urban growth and the concomitant need for land and natural resources will influence countries' ability to achieve an environmentally sustainable and socially inclusive future.

32. As cities grow, managing them becomes increasingly complex. In many cities, unplanned or inadequately managed urban expansion has led to urban sprawl, pollution, environmental degradation and, in some cases, heightened exposure to the risk of natural hazards (e.g., floods and landslides). Collectively, today's cities are growing twice as fast in terms of land area as they are in terms of population. Projections of future city size growth and urbanization suggest that hundreds of thousands of additional square kilometres will need to be developed. Urbanization is vital for sustainable development, not only because the urban areas of the world are expected to absorb almost all future population growth over the next 15 years, but also because they are major hubs of economic activity, job creation and service delivery. However, urban expansion needs to be undertaken in a sustainable and

inclusive manner, with a view to protecting local habitats and biodiversity and minimizing tropical deforestation and changes in land use.

Figure XIV

Ratio of urban population in 2030 compared to 2015 by percentage of urban dwellers living in slums in 2009



Source: *World Population Prospects: The 2012 Revision — Extended Dataset* and Millennium Development Goals indicators database.

IX. Preparing for future migration

33. In recent years, international migration has grown in scope and complexity. The number of international migrants, defined as persons living outside of their country of birth, rose by nearly 5 per cent, from 221 million in 2010 to 232 million in 2013. Asia and Europe added the largest number of international migrants during this period, around 3 million each, significantly more than all other major areas. The next 15 years could see upwards of 30 million international migrants added worldwide, if current trends continue.

34. While international migration has become an increasingly global phenomenon, most migrants reside in a small number of countries. As of 2013, over half of all international migrants lived in just 10 countries, with the United States of America alone hosting nearly 20 per cent of all international migrants. In some parts of the

world, international migrants account for a sizeable proportion of the total population. In 35 countries or territories, including in several States members of the Cooperation Council for the Arab States of the Gulf, migrants represent 30 per cent or more of the total population. Globally, however, international mobility remains a relatively rare phenomenon, affecting around 3.2 per cent of the world's population.

35. Migration can be a transformative force, lifting millions of people out of poverty and contributing to the sustainable development of countries of origin and destination alike, but only if the human rights of migrants are protected. Migrants are often among the most innovative members of society. They possess diverse cultural viewpoints that enrich host societies, facilitate the exchange of knowledge and skills and foster technological innovation. Migrants fill labour shortages, complement the skills of native workers, create jobs and contribute to social welfare and pension systems. At the same time, the emigration of highly skilled workers can undermine the development efforts of developing countries, particularly in such critical sectors as health care and education. Improving the mutual recognition of educational and professional qualifications would constitute an important step in reducing the underutilization of human capital and skills and would enable migrants to more fully realize their potential both in countries of destination and following their return.

36. A growing number of Governments have shown openness to regular international migration in recent years, with the number of countries adopting policies to either raise or maintain current immigration levels increasing, from 115 countries, in 2005, to 138 countries, in 2011. For migration to fully meet its development potential in a sustainable, equitable and inclusive manner, the human rights of migrants must be protected and fulfilled. This requires ensuring that migrants and their families have equal access to fair wages and social protection, as well as to the highest attainable standards of health and education, regardless of their migration status.

37. One of the most tangible ways in which migration contributes to development in countries of origin is through remittances. In 2014, remittance flows to developing countries were expected to reach $435 billion, more than three times the amount of official development assistance and significantly more than the sum of foreign direct investment to all developing countries, with the exception of China. Reducing the transaction costs of remittances to developing countries by 5 percentage points would yield savings of $16 billion per year, which would serve to significantly improve the well-being of migrants and their families.

38. As the number of international migrants continues to rise and the number of countries affected by migration increases, destination countries are confronted with the challenge of integrating growing migrant populations, which in some cases include large numbers of forced migrants. By 2011, most countries in the developed regions and about half of the 97 developing countries for which data are available had implemented programmes to facilitate the integration of migrants.

39. Victims of human trafficking, who suffer from exploitation and abuse, are a group in need of specific attention.[8] Eliminating human trafficking is an important target that the global community must achieve by prosecuting transnational criminal

[8] *Global Report on Trafficking in Persons 2014* (United Nations publication, Sales No. E.14.V.10).

networks, protecting and assisting victims of trafficking and by implementing policies and programmes for safe, orderly and regular migration.

40. Too often, people are compelled to flee their homes to escape conflict, persecution, environmental degradation or the effects of climate change. In 2013, there were 16.7 million refugees worldwide, the highest level since the Second World War. The number of internally displaced persons has also risen sharply, with approximately 33.3 million persons forcibly displaced within their own country. In addition, climate-related migration could become more prevalent in the future with the anticipated increase in the frequency and intensity of adverse climate events.

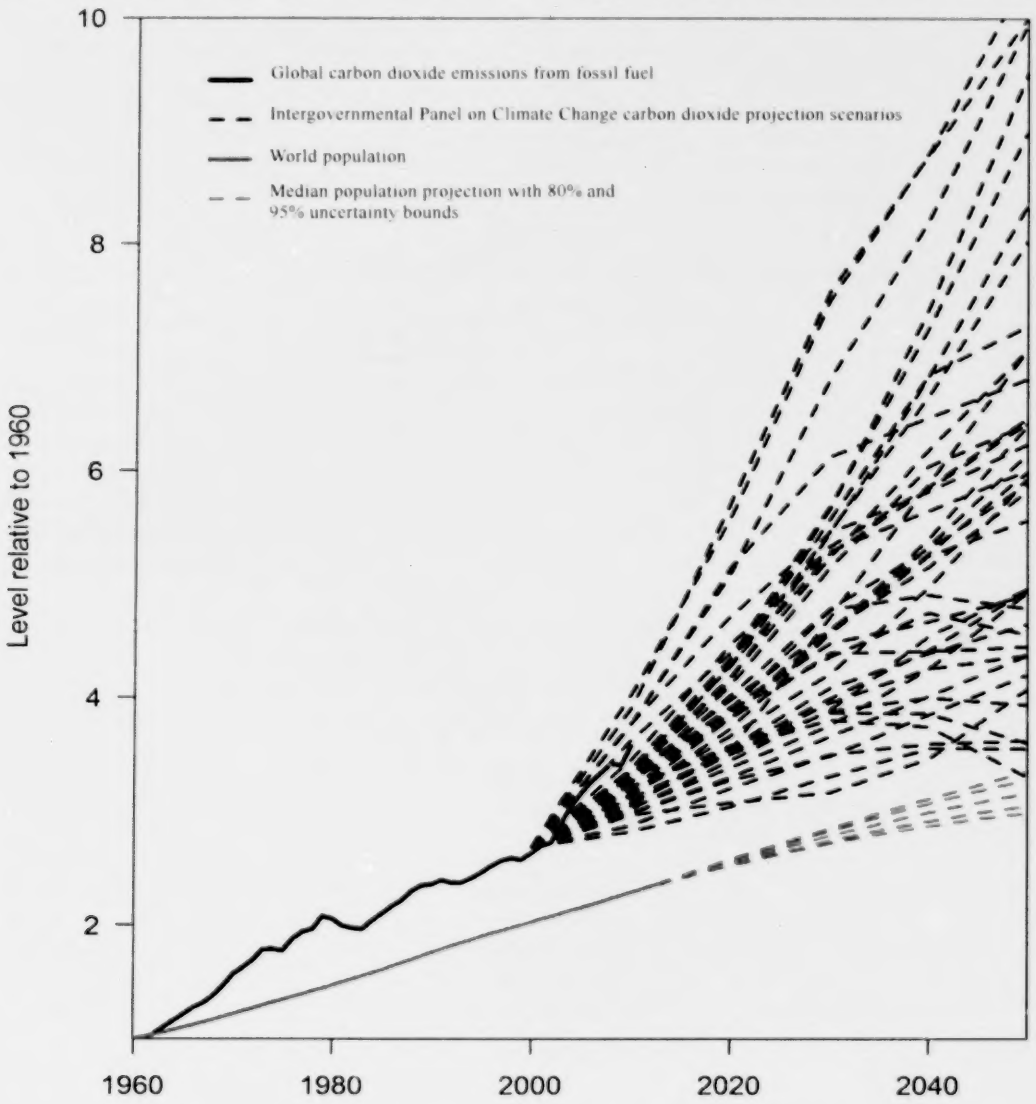
X. Ensuring environmental sustainability

41. The Millennium Development Goals framework only partially integrated environmental concerns, which have become more pressing over the past 20 years. Population growth, increasing standards of living and higher consumption of energy and natural resources have unquestionably contributed to substantial and fundamental changes in the earth's environment. Evidence of global warming is now unequivocal. The concentration of greenhouse gases trapped in the earth's atmosphere has increased, the atmosphere and the ocean have warmed, ice caps have receded and sea levels have risen. The irreversible loss of biodiversity provides some of the clearest evidence of a failure of global stewardship by the current generation.

42. Consumption patterns and technology choices account for more environmental impact than sheer numbers of people. Continued global population growth, together with rising standards of living, implies much higher energy usage, but carbon dioxide emissions in high-income countries are many times higher on a per capita basis than in low-income countries. The growth in global carbon dioxide emissions has far outpaced world population growth (see figure XV). In the 40 years it took for world population to double, global carbon dioxide emissions increased by a factor of around 2.5. The ocean has absorbed about 30 per cent of the emitted anthropogenic carbon dioxide, resulting in significant ocean acidification with serious implications for marine biodiversity. High-income countries need to improve their technology and the effectiveness with which they use resources in order to reduce current unsustainable production and consumption practices, which are causing stress on the planet, and to transfer those technologies to low-income countries that still need to raise living standards and bring people out of poverty.

Figure XV

Size of world population in 2050 relative to levels in 1960 compared to carbon dioxide emissions



Source: *World Population Prospects: The 2012 Revision — Extended Dataset*; World Development Indicators 2014 database; and N. Nakićenović and R. Swart, eds., *Special Report on Emissions Scenarios: A Special Report of Working Group III of the Intergovernmental Panel on Climate Change* (Cambridge, Cambridge University Press, 2000).

43. Food production and distribution will need to improve substantially and food waste will have to be reduced over the next 15 years in order to meet the nutritional needs of an additional 1.1 billion people. Global demand for food is also expected to rise as emerging economies become wealthier. So far, world agriculture has been

able to respond to the rising demand for crop and livestock products. The latest long-range outlook produced by the Food and Agriculture Organization of the United Nations suggests that, at the global level, agricultural production will continue to increase sufficiently to satisfy the additional demand projected to 2050. Agricultural output in 2050 is projected to be 60 per cent higher than levels in 2005/2007, mainly as a function of continuing improvements in yields. Food security will, nevertheless, remain a challenge at the local, household and individual levels, particularly in countries characterized by persistent poverty, declining agricultural productivity as a result of the impact of climate change, and high population growth.

44. Water is another critical resource that is essential for life on earth. Agricultural food production, human health, energy and industrial production and many other activities depend on the effective management, protection and provision of water. Natural freshwater resources are distributed unevenly around the world. Water use has been growing at more than twice the rate of population increase in the past century as a result of economic development, more land being put under irrigation and expanding household and industrial consumption. UN-Water estimates that currently, 1 in 9 people in the world do not have access to improved sources of drinking water and 1 in 3 lack improved sanitation. Since 1990, access to an improved drinking water source has become a reality for 2.3 billion people, but 750 million more people still rely on unsafe sources of drinking water. Approximately 3.5 million people die each year owing to inadequate water supply, sanitation and hygiene. Climate change threatens to decrease the availability of fresh water in many arid and semi-arid regions. By 2025, UN-Water estimates that 1.8 billion people may be living in countries or regions with absolute water scarcity.

45. The imperative need for reducing greenhouse gas emissions has resulted in greater attention being given to improving energy efficiency as a key resource for social and economic development. A recent review[9] of the prospects for improved energy efficiency revealed a variety of benefits of particular importance for emerging economies as they seek to exploit their resource base to reduce poverty and support sustainable growth. In addition, greater use of renewable energy from such sources as solar energy, wind power, waves and geothermal heat holds great promise for meeting future energy demands without adverse ecological consequences.

XI. Global partnerships for sustainable development

46. Numerous documents including the Programme of Action of the International Conference on Population and Development, the report of the Secretary-General on a framework of actions for the follow-up to the Programme of Action of the International Conference on Population and Development beyond 2014 (A/69/62) and the recent synthesis report of the Secretary-General on the post-2015 development agenda, entitled "The road to dignity by 2030: ending poverty, transforming all lives and protecting the planet" (A/69/700) have stressed the importance of global partnerships for sustainable development. The further implementation of the Programme of Action requires a revitalized global partnership that incorporates all relevant stakeholders at the national, regional and global levels. Multi-stakeholder partnerships have proven successful in mobilizing resources,

[9] International Energy Agency, *Capturing the Multiple Benefits of Energy Efficiency* (Paris, 2014).

building trust among stakeholders and fostering consensus around controversial issues. They have also brought about efficiency gains in programme delivery.[10] Initiatives such as Every Woman, Every Child, which was launched by the Secretary-General in 2010 and aims to mobilize and intensify international and national action by Governments, the private sector and civil society to address the major health challenges facing women and children around the world, have proven successful in this regard.[11] In the field of international migration, several partnership initiatives between Governments in countries of origin and destination, international organizations and civil society have also proven successful.

47. Better cooperation mechanisms are required to facilitate labour mobility, reduce the costs of labour migration, including those relating to remittance transaction costs and recruitment, enhance the portability of social security benefits and other acquired rights and promote the mutual recognition of diplomas, qualifications and skills. In addition, the Global Forum on Migration and Development and regional consultative processes have successfully promoted informal dialogue and cooperation on international migration.

48. Greater mutual accountability will help to increase the effectiveness of development partnerships and reduce the fragmentation and duplication of efforts. It can also help reduce transaction and administrative costs and project proliferation, reductions in all of which are crucial to promoting greater country ownership and leadership. At the global level, the United Nations could play a critical role in providing a platform for a strong monitoring and accountability mechanism.[10]

49. The design and implementation of people-centred development strategies, plans, programmes and policies must be based on reliable, robust, accessible and timely data that reflect on past, current and projected changes in the number, age, sex, location and social and economic conditions of the population. Yet many countries still lack such data and information, or existing data remain underutilized and are not considered for development planning, budgeting, monitoring or evaluation. Compliance with statistical standards is still insufficient in some national statistical systems. In many countries, civil registration systems are inadequate and incomplete so that national statistical offices have to rely on sample surveys and censuses for information on key demographic parameters, such as fertility and mortality estimates. In addition, limited use is being made of new technologies, such as geographic information systems and mobile devices, to improve the evidence base. Attention should be given to increasing investments to improve statistical capacities, including through training individuals and building institutions.

XII. Discussion and recommendations

50. The growth of the world's population over the past 60 years has been unprecedented. World population reached 7.3 billion in 2015, twice the number of people that were on the planet in 1969, reflecting the progress that has been made in

[10] United Nations, Technical Support Team, "TST Issues brief: means of implementation — global partnership for achieving sustainable development", available from https://sustainabledevelopment.un.org/content/documents.

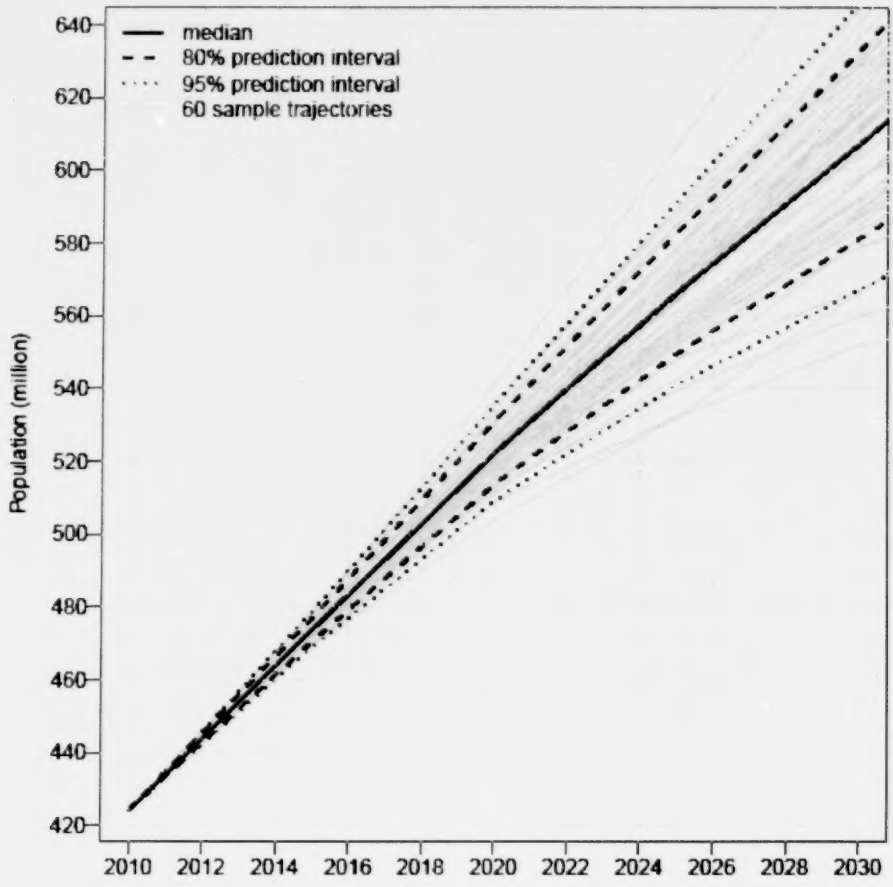
[11] For an overview of the initiative, see http://everywomaneverychild.org/ (accessed 4 December 2014).

combating infectious and childhood diseases and in reducing the burden of premature and avoidable deaths, especially in the poorest countries of the world. Nevertheless, the rapid growth of the world's population, in combination with increasing prosperity, higher standards of living and unsustainable patterns of consumption and production, has led to growing concerns about the impact of human actions on the environment. While the relationship between population size and growth, consumption, technology and the environment is far from simple, lower population growth combined with more responsible patterns of consumption and production would ease pressure on ecosystems to generate food, preserve natural resources and allow the world more time to identify and adopt new technologies.

51. In addition, continued rapid population growth in some countries complicates and exacerbates the challenges associated with delivering basic services and ensuring that no one is left behind. Slower population growth would enable families and Governments to invest more in the health and education of each child, creating a virtuous circle with benefits for the economic, social and environmental dimensions of sustainable development. At the same time, there are a number of countries in which population growth is already very low, or is even starting to decrease, a situation that poses an entirely different set of challenges for achieving sustainable and inclusive growth.

52. The future size of the world population depends greatly on the course of future fertility and in particular the speed of decline in those countries where fertility is still high. Probabilistic projections produced by the Population Division indicate that there is a 95 per cent probability that the population of Africa will increase over the next 15 years by between 98 million and 168 million and a 95 per cent probability that the population under age 15 will be between 567 million and 646 million in 2030 (see figure XVI). Achieving universal access to sexual and reproductive health care for women and adolescents remains one of the most critical components of the unfinished agenda of the Programme of Action of the International Conference on Population and Development. Not only is it essential for fulfilling the human rights of women, it also has implications for the development of countries and the success of poverty alleviation strategies. Worldwide, at least 1 in 10 women who are married or in a union still have an unmet need for family planning information and services. Closing the gap between childbearing desires and contraceptive use would help to avoid unwanted pregnancies, including adolescent pregnancies, and reduce maternal and child mortality. Rights-based approaches, such as ensuring universal access to sexual and reproductive health care and reproductive rights, and the elimination of child, early and forced marriage, allow women to have control over the number and spacing of their children and thereby contribute to slowing population growth at the global level.

Figure XVI
Probabilistic projection of the population of Africa (aged 0-14) in 2030



Source: Department of Economic and Social Affairs, Population Division, Probabilistic Population Projections — based on *World Population Prospects: 2012 Revision* (2014). Available from http://esa.un.org/unpd/ppp/index.htm.

53. Per capita material consumption in the richest countries of the world is now far above a level that would be sustainable for everyone in a growing world. While slowing population growth would benefit sustainable development, there also needs to be a significant improvement in global resource efficiency and consumption patterns. Governments need to develop infrastructure for more efficient transportation, energy, water and waste management, and good practices in managing such resources must be exchanged between countries in order to improve energy and resource efficiency. Food waste and the inefficient use of freshwater will also need to be addressed in order to eradicate poverty, combat hunger and end food insecurity.

54. Many countries need to anticipate and plan for significant urban growth over the next 15 years. Higher population density often affords local governments the opportunity to lower the per capita cost of providing infrastructure and basic services to urban residents and may also be beneficial for minimizing the effect of the population on local

ecosystems. Nevertheless, as cities grow, managing them becomes increasingly complex. The speed and sheer scale of the urban transformation over the next 15 years will present formidable challenges, yet if these challenges can be overcome, the returns for the achievement of sustainable development would be significant.

55. The new development agenda will also have to take into account the fact that the world population is ageing rapidly. By 2030, 1 in 6 people will be over 60 years of age, and in Europe, North America and parts of East Asia that fraction will be greater than 1 in 4. Rapid ageing is already putting pressure on pension and social systems. In many middle-income countries, population ageing is occurring at the same time as many other economic and social transformations, raising concerns about the possible weakening of traditional family value systems. In such cases, greater attention will need to be given to providing higher levels of coverage in terms of social protection, including through pensions and health care, as well as to policies that are sensitive towards and supportive of the family.

56. Policymakers should prepare for higher levels of international migration over the next 15 years and implement policies and programmes aimed at facilitating orderly, safe and regular migration, while enhancing the benefits of migration and addressing migration challenges. Respecting and promoting the rights of migrants and reducing the costs of migration are essential to ensure the well-being of migrants and that migration meets its full development potential. Future international migration may also be affected by environmental change, as people with the least resources are likely to be the most vulnerable to the adverse effects of climate change.

57. The further implementation of the Programme of Action, as well as achievement of the sustainable development goals, will depend on forging new and stronger partnerships with the active engagement of Governments, civil society, the private sector and the United Nations system. Strengthening evidence- and rights-based development strategies, programmes and policies depends on the availability of reliable, robust, accessible and timely population data. Many countries currently lack the capacity to collect and disseminate data and statistics that are timely and disaggregated by age, sex and other characteristics relevant to national contexts. Such data are essential to support the monitoring of the implementation of the sustainable development goals and to assure accountability so that no one is left behind.

58. More than any other negotiated agreement, the Programme of Action of the International Conference on Population and Development emphasizes the closely knit interrelationships between ongoing population dynamics, sustained economic growth and sustainable development and provides a comprehensive set of objectives and actions to promote social justice, eradicate poverty and protect the environment in order to meet the needs of both current and future generations. Most critically, the Programme of Action places the emphasis on improving the lives of individuals and increasing respect for their human rights. It advocates for the empowerment of women, both as an important goal in its own right and as a key means of improving the quality of life for everyone. These insights have been recognized and reaffirmed by Member States on many subsequent occasions, including on 22 September 2014, during the twenty-ninth special session of the General Assembly, convened to assess the status of implementation of the Programme of Action. At that session, many Member States renewed political support for the continuing centrality of the Programme of Action and for ensuring that the principles and objectives contained therein be fully integrated into the post-2015 development agenda.